

30 November 2000



Maintenance

**GUIDELINES FOR PREVENTING,
INVESTIGATING AND REPORTING FOREIGN
OBJECT DAMAGE (FOD)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes a program for Foreign Object Damage (FOD) prevention and applies to all units and personnel assigned or attached to the 62d Airlift Wing (62 AW) and McChord Air Force Base.

1. References. AFI 21-101, *Maintenance Management of Aircraft*; AFI 91-204, *Safety Investigations and Reports*; AFOSHSTD 91-100, *Air Force Occupational Safety and Health Standard*; AMCI 21-101, *Maintenance Management Policy*; 62 AWI 21-8, *Aerospace Vehicle Parking Plan*.

2. General. FOD prevention is the responsibility of all personnel. Commanders and supervisors will ensure that all maintenance, operations, and base support personnel who work in, around, or drive through operational areas understand and comply with FOD prevention. To help prevent FOD, avoid wear of loose clothing or other articles that could be drawn into an engine intake or otherwise prevent the normal operation of equipment or systems. Examples of such articles would include: hats, hair fasteners, wigs, hairpieces, earrings with metal clips or metal grade insignia. Hats or caps will not be worn in an intake danger zone, as defined by the specific aircraft TO, while engines are operating.

3. FOD Prevention Committee. The 62 AW FOD Prevention committee will be composed of representatives from organizations whose personnel perform duties on or in the area of the flight line. Unless specified, units listed will provide a letter to the 62 AW FOD Prevention Manager, Commander, 62 Logistics Group (62 LG), and to the FOD Prevention Program Office (62 LG/QAP Phoenix Star), designating primary and alternate FOD Prevention Monitors.

3.1. 62d Airlift Wing:

3.1.1. 62d Wing Safety (62 AW/SE)

3.1.2. 62d Operations Group, Standardization/Evaluation (62 OG/DOV)

3.1.3. 62d Aerial Port Squadron, Operations (62 APS/TRO)

- 3.1.4. 62d Transportation Squadron, Vehicle Maintenance (62 TRNS/LGTM)
- 3.1.5. 62d Supply Squadron, Fuels Management (62 SUPS/LGSF)
- 3.1.6. 62d Aircraft Generation Squadron (62 AGS)
- 3.1.7. 62d Maintenance Squadron (62 MXS)
- 3.1.8. 62d Civil Engineer Squadron (62 CES)
- 3.1.9. 62d Security Forces Squadron (62 SFS)
- 3.1.10. 62d Operations Support Squadron, Airfield Management (62 OSS/OSAA)

3.2. Tenant Units:

- 3.2.1. 446th Airlift Wing Safety (446 AW/SE)
- 3.2.2. Det 1, HQ Washington Air National Guard (WAANG/MA) (committee member only)

4. Responsibilities:

4.1. The 62d Logistics Group Commander will direct impoundment of aircraft/equipment when conditions (FOD damage) warrant investigation (in compliance with 62 AW 21-8).

4.2. 62 LG/QAP will:

- 4.2.1. Schedule and prepare agenda items for “quarterly” FOD committee meetings.
- 4.2.2. Assist squadron FOD monitors in investigating each case of Foreign Object Damage (FOD) to determine its cause. Report FOD mishaps according to AFI 91-204. Forward detailed reports to HQ AMC/LGB (HQ AFRC/ LGM for HQ AFRC units) for review.
- 4.2.3. Promote a FOD prevention publicity program, to include establishing a FOD recognition program.
- 4.2.4. Perform random FOD inspections of each squadron maintenance area. A checklist will be used as a guide and this checklist will be distributed to applicable squadrons for their use.
- 4.2.5. Notify the respective squadron commander or supervision of any significant findings upon completion of the inspection.

4.3. Squadron commanders (APS, AGS, MXS, TRANS, SUP, CES, SFS, DET 1 ANG) will assign Squadron FOD Prevention Monitors and ensure they:

- 4.3.1. Comply with the rules of AFOSHSTD 91-100 (section 1.2.6.-1.2.7.2), AFI 91-204, AFI 21-101 (Section 7.12), Foreign Object Damage (FOD), and AMCI 21-101, (Section 3.3.5). AFI 21-101 (Section 7.12.2) specifies FOD Investigation and Reporting Procedures as appropriate.
 - 4.3.1.1. Establish a squadron FOD orientation program that includes briefings on the cost and importance of FOD prevention, spot checks of vehicles and ramp areas for FOD, and a tool control program. Operation of flight line vehicles on unpaved surfaces will be avoided when possible.
 - 4.3.1.2. NOTE: If operation of flight line vehicles in unpaved areas is necessary, supervisors will ensure vehicles are stopped when entering the flight line and vehicle tires are inspected for debris collected in the tire treads.

4.3.2. Schedule monthly FOD walks for their units as required. The 62 CES will provide ramp sweeper service as required. See Attachment 1 for squadron areas of responsibility.

4.4. 62 AGS and 62 MXS work center supervisors will:

4.4.1. Ensure all consolidated tool kits (CTK), or equivalent, are inspected for tool accountability at the completion of the task and all foreign objects are removed.

4.4.2. Ensure plastic/cloth bags are used to control hardware during maintenance.

4.4.3. Ensure engine run spots are inspected for ramp condition/potential FOD prior to operation of any aircraft engine, and engine inlet (62 AWI 21-3, *Ground Engine Run Procedures*).

4.4.4. Ensure all work tasks, regardless of location include a thorough cleanup as part of that task.

4.4.5. Ensure their respective aircraft parking area is policed up (Aerospace Ground Equipment, stands, FOD, trash, i.e. rags, hardware on stands etc.) at all times and that specialists dispatched to perform aircraft maintenance accomplish a thorough cleanup of their work area prior to leaving the aircraft. A FOD inspection of the parking spot will be performed immediately preceding the block-in and immediately prior to and following the block-out of the aircraft.

4.4.6. Ensure all engine inlets are inspected, and engine and pilot covers are installed after last flight of the day. All engine inlet covers will be reinstalled if there is a significant flight delay.

4.4.7. Ensure the engine test cell areas are thoroughly inspected for debris and ramp surface condition prior to any engine run.

4.4.7.1. Engine test cell will ensure for all Aerospace Maintenance And Regeneration Center (AMARC) returning engines: all cowl doors are opened, and the interior of each door and associated ducting is thoroughly inspected for FOD potential and all foreign objects removed before engine run.

4.5. Organizations using the Lima Pad area (see Attachment 1) are responsible for ensuring this area is kept clean before, during, and after its use.

5. Actual or Suspected FOD Reporting and Investigation Procedures:

5.1. Supervisors will notify 62 AW Maintenance Aircraft Coordination Center (MACC) immediately upon finding or suspecting FOD to aircraft, equipment or facilities. The MACC will notify the Group Commander, and Wing Safety, the work center responsible for maintaining the damaged equipment, and the on-duty LG Quality Assurance representative. Individuals finding or suspecting FOD will make every effort to leave the aircraft or equipment in the same condition as discovered until a preliminary FOD investigation is completed.

5.2. An investigation team will investigate each occurrence of FOD. The LG will appoint a team leader. Follow investigation procedures established by AFI 91-204, AFI 21-101 (Section 7.12.2), and AMCI 21-101 (Section 3.39). Aircraft or vehicle tires that have FOD, don't require an investigation team

5.3. Investigators will use the McChord AFB Form 100, *Maintenance Mishap Report*, to investigate and report FOD incidents. The information will be provided to LG/QAP who will forward to 62 AW Safety for their report IAW AFI 91-204, Air Force Mishap Reporting Procedures and to Quality Assurance.

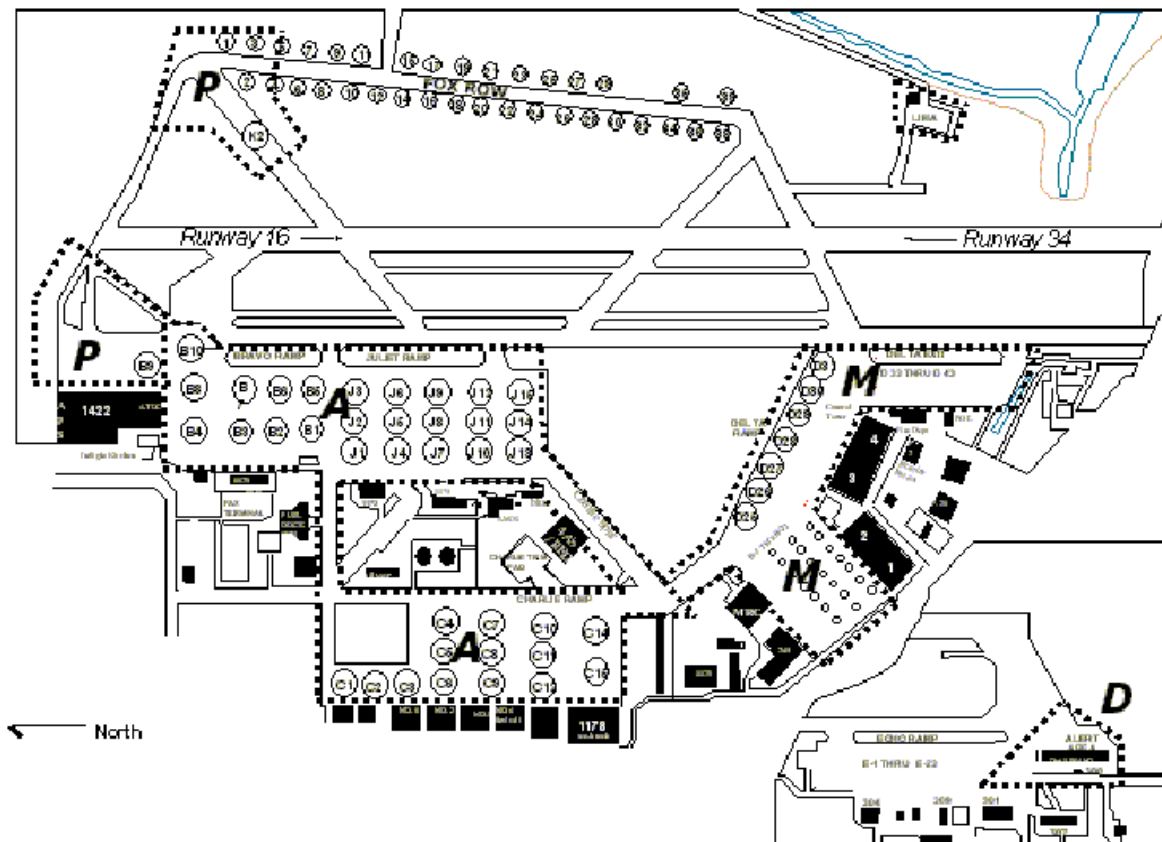
5.4. When a suspected FOD engine is received from off base:

5.4.1. The responsible en route base shall initiate the FOD investigation according to AFI 91-204, and forward initial investigation results to the 62 LG/QAP who will forward to 62 MXS Propulsion Flight. upon receipt of engine, 62 MXS Propulsion Flight will conduct a boroscope inspection to determine extent of damage. The Propulsion Flight will estimate cost when damage is not Depot level only engine tear down; all other damage will be reported to Depot for cost estimate. Cost estimate information, either from Propulsion Flight or Depot, will be forwarded to 62 LG/QAP who will forward it to HQ AMC/LGBCP and 62 AW Safety.

5.5. The 62 AW Safety Office will provide a copy of all preliminary and final FOD incident reports to the LG/QAP, and will act as the focal point for disseminating FOD program information to flying squadrons as required.

STEPHEN A. HUMPHREY,, Col, USAF
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Attachment 1 ATTACHMENT 1 MCCHORD AIR FORCE BASE AIRFIELD MAP

**MCCHORD AFB FLIGHTLINE**

OPR 62 LG/QAP MSgt Scott McCormick
17 AUG 98

FOD WALK RESPONSIBILITY AREAS -

A - AGS **D** - W ANG DET 1 **M** - MXS **P** - APS